

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for reformatting binary image data, comprising the sequential steps of:
  - converting source binary image data into gray scale image data;
  - segmenting the converted gray scale image data into a first plane having high spatial frequency gray scale image data and a second plane having low spatial frequency gray scale image data; and
  - separately compressing the high spatial frequency gray scale image data in the first plane and the low spatial frequency gray scale image data in the second plane.
2. (Previously Presented) The method of claim 1, wherein segmenting gray scale image data includes segmenting the high spatial frequency gray scale image data into a plurality of blocks based on gray scale levels of the high spatial frequency gray scale image data.
3. (Original) The method of claim 1, further comprising:
  - enhancing the low spatial frequency gray scale image data in the second plane.
4. (Previously Presented) A computer readable storage medium that stores a program that embodies the method of claim 1.
- 5-8. (Canceled)
9. (Currently Amended) An apparatus to reformat binary image data, comprising:
  - a converter to convert source binary image data into gray scale image data;

a segmentor to segment the converted gray scale image data into high spatial frequency gray scale image data in a first plane and low spatial frequency gray scale image data in a second plane;

a first compressor to compress the high spatial frequency gray scale image data in the first plane; and

a second compressor to compress the low spatial frequency gray scale image data in the second plane.

10. (Previously Presented) The apparatus of claim 9, wherein the segmentor segments the high spatial frequency gray scale image data into a plurality of blocks based on gray scale levels of the high spatial frequency gray scale image data.

11. (Original) The apparatus of claim 9, further comprising:  
a filter to enhance the low spatial frequency gray scale image data in the second plane.

12. (Original) A marking device incorporating the apparatus of claim 9.

13. (Original) A digital photocopier incorporating the apparatus of claim 9.

14. (Original) A stand alone document scanner or a multifunctional device incorporating the apparatus of claim 9.

15-20. (Canceled)